



Optivity Telephony Manager

Features and Benefits

- Simplifies operations through a single point of data entry which will increase accuracy and eliminate duplicate effort
- Provides a unified view of the telephony network and allows network managers to be proactive in ensuring that network investments are fully utilized
- Delivers Web-based features that extend the management reach and allow for end-user self-management
- Offers an affordable solution for both large and small companies
- Scales to support ever-expanding network topologies, technologies, and applications
- Includes legacy support for Meridian 1 network elements

Nortel Networks Optivity* Telephony Manager is the premier management application for Meridian* 1 and Succession* Communications Server for Enterprise (CSE) 1000. Companies can rely on this integrated suite of management tools for configuration, control and analysis of their telephony network, either through a Windows graphical user interface (GUI) or Web browser interface. In addition, Optivity Telephony Manager can be easily integrated with the Optivity suite of management applications to provide a complete management view of an entire converged network infrastructure.

Optivity Telephony Manager provides a single point of access for:

- Connectivity to Meridian 1* and Succession CSE 1000 systems and their associated telephony elements.
- Data collection for traffic and billing records.

- Alarm and event collection, distribution and notification.
- Data entry and propagation to related databases.

Optivity Telephony Manager offers flexible corporate directory services for customized reporting, as well as advanced call tracking features with graphical reporting for trending and call pattern analysis. Optivity Telephony Manager also includes sophisticated billing services, Lightweight Directory Access Protocol (LDAP) synchronization, a Web-based Network Navigator, a Web-based Alarm Viewer, and Web-based desktop management services.

Companies can deploy Optivity Telephony Manager to manage and maintain their communications networks in a cost-effective manner. End-users can manage features on their telephone sets through a Web browser increasing their productivity and freeing the network administrator to focus on higher-level tasks. Synchronizing Optivity Telephony Manager with an LDAP server will greatly reduce duplicate data entry and improve database accuracy.

Converging Telephony and Data Management

Companies with PBX-based telephony networks look for the cost savings and efficiencies that IP-enabled infrastructures can offer. However, in environments containing large networks of widely distributed systems, most companies have been unable to obtain a system-level view of the network. This high-level perspective is crucial for monitoring network usage, optimizing performance, and planning for future expansion.

Network managers can use Optivity Telephony Manager to access PBX systems and applications over the Web from any browser-enabled workstation. Remote management streamlines the process of monitoring and managing multiple telephony network elements.

Optivity Telephony Manager is a key building block in the management of converged telephony, video, and data networks, allowing network operations to be simplified and total cost of ownership to be reduced. Utilizing the powerful synergy between concurrent installations of Optivity Telephony Manager and

Optivity Network Management System or HP OpenView, network managers can take advantage of a system-level view of the network and plan for network expansion and convergence.

Features and Benefits

Single Management Platform

While other vendors offer multiple management applications that run on disparate operating systems to support different products, releases, and applications, Optivity Telephony Manager provides a single management platform. Optivity Telephony Manager Server runs on Windows 2000 or Windows NT.

Call Tracking

Call Tracking is a call monitoring feature that examines call usage patterns leading to toll fraud detection. It includes graphical reporting capability for trending and call-pattern analysis. It also provides alarm notification, which can be used to warn managers of unusual calling patterns and assist in the quick detection of unauthorized telephone usage. Administrators can define multiple alarm templates to detect different calling patterns, including calls exceeding a certain duration, calls made at unusual times, or calls to unusual destinations. Call Tracking can also be configured to provide real-time performance monitoring of incoming or outgoing calls on an individual extension. The Call Tracking module is provided as part of the Telecom Billing System.

Alarm Management

Alarm and event management is a key component of Optivity Telephony Manager. The Web Alarm Viewer prioritizes, sorts, and displays system events received from Meridian 1 PBXs, Succession CSE 1000 and other network devices. Alarms collected in the log file are accessible to authorized users via a

Windows GUI or Web browser window. Web access to Optivity Telephony Manager alarms and events allows network administrators to manage standalone voice devices from a central location. An Alarm Notification wizard is also available to assist network managers in customizing the notification and escalation parameters that are applied by Optivity Telephony Manager after receiving an alarm message. Alarm Notification can be configured to notify the network manager via pager, email or fax.

Traffic Analysis

Traffic Analysis is used to analyze device resources and traffic patterns. It provides information such as trunk usage, peak periods, processor loads and loop traffic. Traffic Analysis converts raw traffic statistics, either on demand or on a scheduled basis, and presents the statistics to the network manager in a simplified format.

Telecom Billing System

Optivity Telephony Manager Telecom Billing System is a call-costing and reporting application. It is integrated with Optivity Telephony Manager's common utilities and database and is launched from the Optivity Telephony Manager Navigator system window. The Telecom Billing System includes the following features:

- Call Detail Record (CDR) collection
- Call usage details and reports for cost allocation within an organization or for client billing purposes
- A wide variety of cost allocation, network utilization, and system administration reports for multiple costing models over multi-level organizational hierarchies

- Professional-quality reports using TrueType fonts and customizable report logos
- "What if" scenario capabilities to analyze multiple telephone service rate structures

Telecom Billing System runs on the same platform as Optivity Telephony Manager – either on the Optivity Telephony Manager server itself or on a network-installed client. It is fully integrated with the database structure of Optivity Telephony Manager. This application retrieves all relevant employee information directly from the Optivity Telephony Manager Directory, which is linked to the Optivity Telephony Manager Station Administration application. Call Detail Records can be spooled directly to the Optivity Telephony Manager Server to eliminate the need for external buffer boxes. This lowers the total cost of ownership and simplifies the administration of the telephony network.

LDAP Synchronization

LDAP Synchronization provides automated synchronization of directory data (user name, department number, directory number, etc.) between an LDAP Directory Server on the network and the data fields in Optivity Telephony Manager. LDAP integration reduces the day-to-day data entry costs associated with keeping corporate databases current. Optivity Telephony Manager supports LDAP synchronization with both Netscape and Microsoft Exchange databases.

Station Administration

Station Administration will simplify day-to-day adds, moves and changes by allowing station programming from an Optivity Telephony Manager Windows client. Network managers can configure telephone sets, program features and assign DN's and TN's for single sets or groups of telephones.

Desktop Services

Optivity Telephony Manager includes a Web-based station administration application that provides end-users with an easy-to-use on-line help system. End-users can review personalized profiles that display their telephone set configuration, and then access on-line help providing details on how to use the phone and its programmed features. The on-line help files can be fully customized by the network manager. End-users can also be given permissions to make feature changes to their own telephones.

Virtual Terminal Service

Optivity Telephony Manager provides a single point of connectivity to the Meridian 1 system and other telephony applications, such as Meridian Mail, CallPilot*, Symposium*, and the Business Communications Manager. This service can access devices over IP or serial ports. System administrators can access the Optivity Telephony Manager Server from any station with Internet Explorer or Netscape Navigator installed. Establishing a connection to the system/device does not require knowledge of IP address, serial port, or settings of the system/device because the routing information is stored in the Optivity Telephony Manager Server.

Access Server

Access Server offers terminal server-like capabilities. It provides the ability to access Optivity Telephony Manager via Command Line Interface (CLI) and have the input passed through to a specific connected device. This functionality can be used to connect to multiple on-site devices, connected via a serial interface, simply by dialing in to an on-site Optivity Telephony Manager server. This feature is sold as an unbundled product and can be used with any of the three package levels of Optivity Telephony Manager.

Corporate Directory

Enterprises can define parameters and generate reports from corporate station and user data that is associated with a terminal number. These reports can include up to 100 different data fields, including the name, extension, location, and department associated with each terminal number. Directory reports can be generated in Microsoft Excel, HTML, or Snapshot format for exporting or Web publishing. Information is stored in a SQL database, and Optivity Telephony Manager Station Administration and Telecom Billing System share the same data.

ESN Analysis

ESN Analysis has been designed to assist users in configuring, analyzing and managing large complex ESN (least cost routing) network. This feature includes tools for reporting, analyzing and modifying existing ESN data and adding new ESN data.

Optivity Telephony Manager Package Options

Optivity Telephony Manager is available in three upgradable configurations, each addressing a different set of management requirements.

General Package

Customers receive a complete set of applications designed to provide management and control of the Nortel Networks telephony solutions portfolio at a low entry cost. If additional functionality is required, customers can easily upgrade to the higher-level service packages.

Enhanced Package

By building on the features provided in the General Package, Optivity Telephony Manager provides advanced management features for the Nortel Networks telephony solutions portfolio. These include Web interfaces for user self-management and sophisticated remote management solutions designed to enhance the productivity of the network manager.

Premium Package

Integrated management interfaces and sophisticated system and network control applications for high-end system administration are featured in the Premium Package. This configuration builds on the functionality included in the Enhanced Package to enable enterprises to benefit from features such as LDAP Synchronization, thus providing lower total cost of ownership of the telephony infrastructure.

System Requirements

Software Requirements

Optivity Telephony Manager Server

Software Requirements

- Microsoft Windows NT Server 4.X, Service Pack 5, and Option Pack 4 or
- Microsoft Windows NT Workstation 4.X or
- Microsoft Windows 2000 Server, and Service Pack 1
- Microsoft Windows 2000 Professional (stand-alone and Web server only)

Note: The following configurations of Optivity Telephony Manager 1.1 are not supported on Windows 2000:

- Microsoft Windows NT 4.X Server with Windows 2000 Professional as clients
- Microsoft Windows 2000 Professional as Optivity Telephony Manager 1.1 Windows file server

Optivity Telephony Manager Client

Software Requirements

- Microsoft Windows NT Server 4.X or
- Microsoft Windows NT Workstation 4.X or
- Microsoft Windows 2000 Server or
- Microsoft Windows 2000 Professional or
- Microsoft Windows 95/98

Optivity Telephony Manager Web Client

- Internet Explorer 5.X or
- Netscape Navigator 4.5 or higher
- Java Runtime Environment (current version)

Additional Software

- TCP/IP Protocol
- Remote Access Service
- Network Card Drivers

Hardware Requirements

Optivity Telephony Manager Server

- Intel Pentium II PC (400 MHz or above)
- 2 GB hard drive or greater (plus data storage requirements)
- 256 MB of RAM (minimum)
- CD-ROM Drive and 3 1/2 inch 1.44 MB floppy disk drive
- 2 Ethernet network interface cards (connection with embedded LAN and customer LAN)
- SVGA Color Monitor and interface card (800 X 600 resolution for graphics)
- PC COM port with 16550 UART
- Printer port (LPT) required for dongle
- Windows compatible mouse (PS/2 mouse preferred to free up a PC serial port)
- Dongle (for server or standalone only)
- Hayes compatible modem (if connection to remote systems is required)

Optivity Telephony Manager Client

- Intel Pentium PC 200 MHz or above (Pentium II 300 MHz or above required for running Telecom Billing System)
- 2 GB hard drive with 500 MB free space
- 64 MB of RAM (minimum)
- CD-ROM Drive and 3 1/2 inch 1.44 MB floppy disk drive
- Ethernet network interface card
- SVGA Color Monitor and interface card (800 X 600 resolution for graphics)
- Windows compatible mouse

Ordering Information

New Installations – Optivity Telephony Manager

- Standard software delivery for Optivity Telephony Manager is via CD-ROM. A keycode is used to restrict access to only the features that were ordered. One (1) CD-ROM will be shipped

with the initial order. All subsequent orders, at the same release level, will result in a new label being produced with an updated keycode.

- Soft copies of the Optivity Telephony Manager user guides (Adobe Acrobat PDF format) are available on a separate documentation CD-ROM.

- For Optivity Telephony Manager General, Enhanced and Premium packages the default number of sets on an initial order is 50. Additional set expansions can be purchased in increments of 50, 250, 1000 or 5000. The maximum number of supported sets is 128,000.
- The maximum number of clients supported is 255.

Order No.	Description
NTTL01AB	OTM 1.1 General, Server License, 50 Sets
NTTL01BB	OTM 1.1 Enhanced, Server License, 50 Sets
NTTL01CB	OTM 1.1 Premium, Server License, 50 Sets
NTTL22AB	OTM 1.1 General, Server License, 50 Sets, UK PBX Bundle (Europe)
NTTL23AA	OTM 1.x General, 50 sets Expansion (Europe)
NTTL02AA	OTM General 50 Sets Expansion
NTTL02BA	OTM General 250 Sets Expansion
NTTL02CA	OTM General 1,000 Sets Expansion
NTTL02DA	OTM General 5,000 Sets Expansion
NTTL03AA	OTM Enhanced 50 Sets Expansion

Order No.	Description
NTTL03BA	OTM Enhanced 250 Sets Expansion
NTTL03CA	OTM Enhanced 1,000 Sets Expansion
NTTL03DA	OTM Enhanced 5,000 Sets Expansion
NTTL04AA	OTM Premium 50 Sets Expansion
NTTL04BA	OTM Premium 250 Sets Expansion
NTTL04CA	OTM Premium 1,000 Sets Expansion
NTTL04DA	OTM Premium 5,000 Sets Expansion
NTTL19AA	OTM Client for one (1) PC
NTTL19BA	OTM Client for five (5) PCs
NTTL19CA	OTM Client for ten (10) PCs

New Installations – Telecom Billing System

- For Optivity Telephony Manager Billing General, the default number of Reporting Units (RUs) supported is 50. Additional RUs expansions can be purchased in increments of 50, 250, 1,000, 5,000, 10,000 and 50,000. The maximum number of RUs supported is 128,000 RUs.
- Optivity Telephony Manager Billing General package requires one of the Optivity Telephony Manager General, Enhanced or Premium packages to be ordered first or on the same order.

Order No.	Description
NTTL05CA	OTM Billing General, 50 RUs
NTTL06GA	OTM Billing General, 50 RUs Expansion
NTTL06AA	OTM Billing General, 250 RUs Expansion
NTTL06BA	OTM Billing General, 1,000 RUs Expansion
NTTL06CA	OTM Billing General, 5,000 RUs Expansion
NTTL06DA	OTM Billing General, 10,000 RUs Expansion
NTTL06EA	OTM Billing General, 50,000 RUs Expansion
SV000397	OTM Rate Tables (North America)

Order No.	Description
SV000411	OTM General Rate Tables (Europe)
SV000412	OTM Enhanced Rate Tables (Europe)
NTZK52BA	MDR 2000 Buffer Box 128 Kb (117 VAC/60 Hz)
NTZK52CA	MDR 2000 Buffer Box 512 Kb (117 VAC/60 Hz)
NTZK52DA	MDR 2000 Buffer Box 2 Mb (117 VAC/60 Hz)
NTZK52FA	MDR 2000 Buffer Box 128 Kb (230 VAC/50 Hz)
NTZK52GA	MDR 2000 Buffer Box 512 Kb (230 VAC/50 Hz)
NTZK52HA	MDR 2000 Buffer Box 2 Mb (230 VAC/50 Hz)

Unbundled Software

Order No.	Description
NTTL17AA	OTM Access Server

Upgrades – Within Release

- When upgrading, the customer is required to order the set expansion to match the original number of sets in addition to the enhancement module.

Order No.	Description	Order No.	Description
NTTL11AA	OTM 1.1 General to Enhanced Upgrade, 50 Sets	NTTL13BA	OTM General to Premium, 250 Sets Expansion
NTTL11BA	OTM 1.1 General to Premium Upgrade, 50 Sets	NTTL13CA	OTM General to Premium, 1,000 Sets Expansion
NTTL11CA	OTM 1.1 Enhanced to Premium Upgrade, 50 Sets	NTTL13DA	OTM General to Premium, 5,000 Sets Expansion
NTTL12AA	OTM General to Enhanced, 50 Sets Expansion	NTTL14AA	OTM Enhanced to Premium, 50 Sets Expansion
NTTL12BA	OTM General to Enhanced, 250 Sets Expansion	NTTL14BA	OTM Enhanced to Premium, 250 Sets Expansion
NTTL12CA	OTM General to Enhanced, 1,000 Sets Expansion	NTTL14CA	OTM Enhanced to Premium, 1,000 Sets Expansion
NTTL12DA	OTM General to Enhanced, 5,000 Sets Expansion	NTTL14DA	OTM Enhanced to Premium, 5,000 Sets Expansion
NTTL13AA	OTM General to Premium, 50 Sets Expansion		

Upgrades – New Release

- Optivity Telephony Manager 1.0x customers carry forward the following values they have with Optivity Telephony Manager 1.0x when upgrading to Optivity Telephony Manager 1.1:
 - Number of sets (for upgrades to a new release, but not for within release upgrades)
 - Number of clients
 - Access server option

Note: Customers upgrading from 1.0x will automatically lose one (1) client that was mistakenly added to the keycode.

Order No.	Description	Order No.	Description
NTTL25AB	OTM 1.0x Upgrade to OTM 1.1 General	NTTL25CB	OTM 1.0x Upgrade to OTM 1.1 Premium
NTTL25BB	OTM 1.0x Upgrade to OTM 1.1 Enhanced	NTTL25DB	OTM 1.0x Billing General Upgrade to OTM 1.1 Billing General

Upgrades - MAT to Optivity Telephony Manager

- Only upgrades from MAT 6.6 are supported. Customers with earlier versions of MAT must upgrade to MAT 6.6 prior to upgrading to Optivity Telephony Manager. Each upgrade should be done with a separate order.
- Customers upgrading from MAT to Optivity Telephony Manager will receive a new server dongle.
- MAT customers with Call Accounting will upgrade to Optivity Telephony Manager Billing General. The customer must define the total number of DNs across all systems and convert them to RUs as follows:

$$\text{RU} = \text{MAT Call Accounting DNs} \times \text{the number of systems (to a max of 3)}$$

- MAT customers with Call Tracking and no Call Accounting will upgrade to OTM 1.1 General + OTM 1.1 Billing with 50 RUs since DNs are not applicable to the MAT Call Tracking application.

Order No.	Description
NTTL08AB	MAT 6.6 Upgrade to OTM 1.1 General, Server License, 50 Sets
NTTL08BB	MAT 6.6 Upgrade to OTM 1.1 Enhanced, Server License, 50 Sets
NTTL08CB	MAT 6.6 Upgrade to OTM 1.1 Premium, Server License, 50 Sets
NTTL09AA	MAT to OTM General Upgrade, 50 Sets Expansion

Order No.	Description
NTTL09BA	MAT to OTM Enhanced Upgrade, 50 Sets Expansion
NTTL09CA	MAT to OTM Premium Upgrade, 50 Sets Expansion
NTTL10AA	MAT Call Accounting to OTM Billing General Upgrade
NTTL18AA	MAT PC Dongle to OTM Client Upgrade

- Following is the minimum Optivity Telephony Manager feature package upgrade for the various MAT applications.

MAT Package OTM Upgrade Entitlement	
Common Services	OTM General
Station Administration	OTM General
Traffic Analysis	OTM Enhanced
Maintenance Windows	OTM Enhanced
ESN Analysis	OTM Premium
Alarm Management	OTM Premium
Call Accounting	OTM Billing
Call Tracking	OTM Billing (50 RUs only)

Software and User Guides

Order No.	Description
P0940586	OTM 1.1 User Guide, English
P0940585	OTM 1.1 Installation and Engineering Guide, English
P0940588	OTM 1.1 Telemanagement User Guide, English
NT8R58AC	OTM 1.1 Software CD-ROM
NT8R58BC	OTM 1.1 Documentation CD-ROM

Services and Support

- Services from MDR and Teltronics are available in North America only.
- For networks with more than 12 network elements (PBX, client, access terminal, server, etc.) and requiring implementation services, the pre-engineering services are mandatory.
- To obtain Help Desk Services, the Implementation Services package from the same vendor is required. The Help Desk Service package is valid for a one-year contract.

Order No.	Description
SV000408	MDR Pre-engineering Services (N.A. only)
SV000396	MDR Implementation Services (N.A. only)
SV000398	MDR Help Desk Services (N.A. only)

Order No.	Description
SV000407	Teltronics Pre-engineering Services (N.A. only)
SV000395	Teltronics Implementation Services (N.A. only)
SV000409	Teltronics Help Desk Service (N.A. only)



For more information, contact your Nortel Networks representative or call 1-800-4-NORTEL.

www.nortelnetworks.com/unifiedmanagement

United States

Nortel Networks
4401 Great America Parkway
Santa Clara, CA 95054
1-877-655-2ASK

Canada

Nortel Networks
8200 Dixie Road
Brampton, Ontario
L6T 5P6, Canada
1-800-466-7835

Europe, Middle East, and Africa

Nortel Networks
Les Cyclades - Immeuble Naxos
25 Allée Pierre Ziller
06560 Valbonne France
33-4-92-96-69-66

Asia Pacific

Nortel Networks
151 Lorong Chuan
#02-01 New Tech Park
Singapore 556741
(852) 2100 2888

Caribbean and Latin America

Nortel Networks
1500 Concord Terrace
Sunrise, Florida
33323-2815 U.S.A.
954-851-8000